Abstract

Doing computation on the collection of computer resources from multiple locations to reach a common goal is known as grid computing. Task scheduling is a very important problem in complex grid environments. Prior, there are numerous numbers of algorithms were proposed to do effective task scheduling. Among them, the min-min algorithm is simple and well-known scheduling algorithm. Even though it works efficiently, some drawbacks in this with respect to load balancing and in resource utilization. To overcome these drawbacks, a new Two Level Load Balanced (TLLB) grid scheduler algorithm is proposed. In the first level, the min-min algorithm is used to create ITQ and in the second level, a new Transformation technique is used to reschedule. The performance analyses show that the proposed algorithm improves the performance in both make span and effective utilization of resources.

References

- Siriluck Lorpunmanee, Mohd Noor Sap, Abdul Hanan Abdullah, and Chai


Index Terms

Computer Science

Algorithms

Keywords

Grid computing
Min-min
Load balancing
resource utilization
Task Scheduling
Flow-time